WHAT IS CLAIMED IS:

1. A route design system among nodes from at least one of starting node through a plurality of relay nodes to a terminal node, comprising:

route candidate design means for designing a plurality of different route candidates from said at least one of starting node to said terminal node; and

accommodation means for accommodating a demand in a predetermined one of the routes designed by said route candidate design means, according to a predetermined procedure.

2. A route design system according to Claim 1,

wherein said route candidate design means includes: a band assignment unit for assigning bands available in the individual route candidates to said plurality of different route candidates; and a priority ordering unit for ordering the priorities of said individual route candidates, and

wherein said accommodation means includes a decision unit for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority, whereby said demand is accommodated in said route of the first priority if said decision unit decides that said space band is had.

3. A route design system according to Claim 2,

wherein said accommodation means accommodates said demand in the route of a second priority, if said decision unit decides that said space band is not had.

4. A route design system according to Claim 3,

wherein said accommodation means further includes an exchange unit for exchanging said route of the first priority and said

route of the second priority after said demand was accommodated in said route of the second priority.

5. A route design system according to Claim 1,

wherein said route candidate design means includes: a band assignment unit for assigning, after a preliminary band was retained, the remaining bands to said plurality of different route candidates; and a priority ordering unit for ordering the priorities of said individual route candidates, and

wherein said accommodation means includes a decision unit for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority, whereby said demand is accommodated in said route of the first priority if said decision unit decides that said space band is had.

6. A route design system according to Claim 5,

wherein said accommodation means accommodates said demand by using the space band of said route of the first priority and said preliminary band, if said decision unit decides that said space band is not had and if the total of the space band of said route of the first priority and said preliminary band is no less than the band demanded by said demand.

7. A route design method among nodes from at least one of starting node through a plurality of relay nodes to a terminal node, comprising:

a route candidate design step for designing a plurality of different route candidates from said starting node to said terminal node; and

an accommodation step for accommodating a demand in a predetermined one of the routes designed by said route candidate design step, according to a predetermined procedure.

8. A route design method according to Claim 7,

wherein said route candidate design step includes: a band assignment step for assigning bands available in the individual route candidates to said plurality of different route candidates; and a priority ordering step for ordering the priorities of said individual route candidates, and

wherein said accommodation step includes a decision step for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority, whereby said demand is accommodated in said route of the first priority if said decision step decides that said space band is had.

9. A route design method according to Claim 8,

wherein said accommodation step accommodates said demand in the route of a second priority, if said decision step decides that said space band is not had.

10. A route design method according to Claim 9,

wherein said accommodation step further includes an exchange step for exchanging said route of the first priority and said route of the second priority after said demand was accommodated in said route of the second priority.

11. A route design method according to Claim 7,

wherein said route candidate design step includes: a band assignment step for assigning, after a preliminary band was retained, the remaining bands to said plurality of different route candidates; and a priority ordering step for ordering the priorities of said individual route candidates, and

wherein said accommodation step includes a decision step for deciding whether or not the route of the first priority has a space band no more than the band demanded by said route of the first priority,

whereby said demand is accommodated in said route of the first priority if said decision step decides that said space band is had.

12. A route design method according to Claim 11,

wherein said accommodation step accommodates said demand by using the space band of said route of the first priority and said preliminary band, if said decision step decides that said space band is not had and if the total of the space band of said route of the first priority and said preliminary band is no less than the band demanded by said demand.